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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,246	05/03/2001	Akira Ikushima	ADACHI P163USP2	6256

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EXAMINER

HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/848,246	IKUSHIMA ET AL.	
	Examiner	Art Unit	
	John Hoffmann	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 8-9: there is no antecedent basis for "the residual heat" or for "the spinning process". Line 4 refers to irradiating spun fiber, but it makes no mention that the process requires spinning. One of ordinary skill would be uncertain as to whether the claims require a step of spinning. And if there is no step of spinning, it is unclear whether there must be residual heat.

It is unclear how to interpret claim 2. It appears that it might recite "the residual heat from the spinning...and further heating". However, there is no antecedent basis for "the residual heating" being from both the spinning and the further heating. Rather, claim 1 already defines the residual heating as being from the spinning.

Claims 3-4 are more confusing because they seem to set forth that "said" defects are removed by the further heating - however claim 1 clearly sets forth that they are removed by the residual heat. It is impossible for both to be met by the same process.

Claim 6 There is no antecedent basis for "The portions". There is only mention of a single irradiated portion.

Claim Objections

Claims 2-4 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 1 requires that "residual heat" remove the defects. Claim 2 requires that residual heat and further heating remove the defects. If the further heating removes the defects, that means that the residual heat only removes part of the defects, or that the residual heat only partially removes the defects. Regardless, such contradicts claim 1 which requires that "said structural defects" be removed by residual heat. Claim 2 is of a mutually exclusive scope from that of claim 1, therefore claim 2 does not further limit claim 1.

Claim 3-4 sets forth that "said" defects are removed by the further heating - however claim 1 clearly sets forth that they are removed by the residual heat. It is impossible for both to be met by the same process. Claim 3 does not further limit claim 1, rather it is completely outside the scope of claim 1.

Claims 2-4 are not further treated on the merits.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiVita 4028080 in view of Boniort 5247147.

See DiVita, col 1, lines 39-50 disclose the invention as claimed, i.e. the UV exposure and the use of heat are disclosed. However, there is no disclosure of residual heat, or any defect creation. Since DiVita does what Applicant does, one would reasonably expect the same results that Applicant got. If Applicant argues that DiVita would not get the same result that Applicant achieved, the burden would be on Applicant to demonstrate why one would not expect to get the same result.

Although, DiVita has the UV treatment during the formation of the fiber, it is possible that the fiber has cooled down to room temperature (and thus contains no residual heat) . Boniort teaches that when using a process requiring a high-temperature, one can place the process close to the draw furnace - and thus use the fiber at an elevated temperature: see col. 1, lines 50-60 and col. 2, lines 51-58. It would have been obvious to do the DiVita treatment very close to the draw furnace, so as to use the elevated temperature of the fiber - so that one would not have to spend time reheating the fiber.

Claim 5 is met for the same reasons as claim 1 is. However, there is no statement that the irradiation is transverse to the axis. Col. 2, lines 20-21 give the structure. Unless there was something else in the cylindrical furnace, UV light would strike the fiber transversely. It would have been obvious to not have anything else in the furnace, because such would block the UV light from hitting the fiber.

Claim 6: Although the prior art does not recognize the defects removing themselves, since DiVita does the same thing that Applicant does, one would expect the same result.

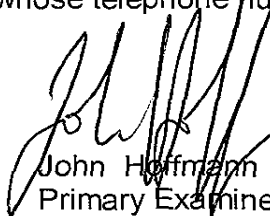
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references cited on the PTO-892 (except for Boniort) are relevant to the disclosed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


John Hoffmann
Primary Examiner
Art Unit 1731
10-31-03

jmh